CLAIMS

1. A method of automatically allocating a unique internet protocol (IP) address to a first node in an integrated intermediate-system-to-intermediate-system (IS-IS) communications network said method comprising the steps of:-

(i) accessing information about one or more potentially available IP addresses;

(ii) selecting one of the potentially available IP addresses; and

(iii) sending information about the selected IP address to nodes in the communications network.

2. A method as claimed in claim 1 wherein said information is sent using a flooding method comprising the use oflink state PDUs (LSPs).

3. A method as claimed in claim 2 wherein said information is sent using LSP extensions.

4. A method as claimed in claim 1 wherein said information is sent using a flooding method comprising an adaptation of the connectionless network service (CLNS) protocol.

5. A method as claimed in claim 1 wherein said step (i) of accessing information comprises accessing a server connected to the communications network.

6. A method as claimed in claim 5 wherein said information is sent using LSPs with anomalous sequence numbers.

7. A method as claimed in claim 1 wherein said step (i) of accessing information comprises accessing the first node which has pre-specified information about one or more potentially available IP addresses.

8. A method as claimed in claim 7 wherein said step (ii) further comprises receiving information at the first node about the IP addresses of other nodes in the communications network, and selecting one of the potentially available IP addresses on the basis of the received information.

9. A method as claimed in claim 8 wherein said information is received during a specified duration.

10. A method as claimed in claim 1 which further comprises using said selected IP address to access the first node using an Internet Protocol management system.

11. A method as claimed in claim 1 wherein said first node is selected from an intermediate system, a router and an optical multiplexer with integral router.

12. A server connected to an integrated intermediate-system-to-intermediate-system (IS-IS) communications network and arranged to automatically allocate an internet protocol (IP) address to a first node in that communications network, said server comprising:-

(i) a store comprising information about one or more potentially available internet protocol (IP) addresses;

(ii) a processor arranged to select one of the potentially available IP addresses; and

(iii) an output arranged to issue one or more messages containing information about the selected IP address.

13. A server as claimed in claim 12 wherein said output is arranged to issue link state PDU (LSP) messages containing information about the selected IP address.

14. A server as claimed in claim 12 wherein said output is arranged to issue messages according to the connectionless network service (CLNS) protocol which contain information about the selected IP address.

15. A communications network node for use in an integrated intermediate-system-to-intermediate-system (IS-IS) communications network and requiring a unique internet protocol (IP) address, said communications network node comprising:-

(i) a store comprising information about one or more potentially available internet protocol (IP) addresses;

(ii) a processor arranged to select one of the potentially available IP addresses; and

(iii) an output arranged to issue one or more messages containing information about the selected IP address.

16. A communications network node as claimed in claim 15 which is selected from an intermediate system, a router, and an optical multiplexer with integral router.

17. A signal comprising one or more integrated intermediate-system-to-intermediate-system (IS-IS) routing protocol messages, at least one of those messages comprising information about an internet protocol address and an associated node.

18. A signal as claimed in claim 17 wherein said one or more messages comprise link state PDU (LSP) extensions.

19. A communications network comprising a server as claimed in claim 12.

20. A communications network comprising a communications network node as claimed in claim 15.